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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/362,631	07/21/1999	RONALD J. MOSSO	N19.12-0020	7098

24113 7590 04/03/2003

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EXAMINER

MAYEKAR, KISHOR

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 04/03/2003

23

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/362,631**

Applicant(s)  
**Mosso et al.**

Examiner  
**Kishor Mayekar**

Art Unit  
**1753**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 17, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-27 and 52-64 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-27 and 52-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102 and § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 20-22, 54 and 55 stand rejected under 35 U.S.C. 102(b) as being clearly anticipated by AXELBAUM et al. (5,498,446), for reasons as of record.
3. Claim 58 stands rejected under 35 U.S.C. 103(a) as being unpatentable over AXELBAUM '446, for reasons as of record.
4. Claims 20-22, 54, 55, 63 and 64 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-67836, for reasons as of record. Further, JP' 836 discloses in the second paragraph of page 4 of the translation that the CO<sub>2</sub> laser beam is

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absorbed by reaction gas (23) ejected from gas injection nozzles (24), inducing the reaction (1) to form  $\text{Si}_3\text{N}_4$  fine powder. As such the above claims is alternatively rejected as being unpatentable over JP '836 to the provision of plurality of reactant inlets because "the motivation to make elements separable was held to have been obvious", *In re Dulberg* 129 USPQ 148.

5. Claims 23, 25-27, 52, 53, 58 and 59 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP '836, for reasons as of record.

6. Claims 24, 56, 57 and 60-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP '836 as applied to claims 23, 25-27, 52, 53, 58 and 59 above, and further in view of BEATY et al. (5,194,128), for reasons as of record.

### ***Response to Arguments***

7. Applicant's arguments filed January 17, 2003 have been fully considered but

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they are not persuasive.

In response to Applicant's argument that since AXELBAUM '446 does not teach a plurality of independent reactant streams, AXELBAUM '446 does not prima facie anticipate Applicant's claimed invention, the Examiner finds this is to be unpersuasive. It is because AXELBAUM clearly discloses in Figs. 1 and 3 and in col. 4, lines 30-40 that the apparatus comprises a plurality of reactant inlets (one inlet for gaseous chlorides and one inlet for sodium vapor) configured to direct a plurality of independent streams (gaseous chlorides and sodium vapor) toward a product outlet, and a particle collection apparatus connected to the product outlet to collect the product particles generated from the reaction of the two vaporous materials (gaseous chlorides and sodium vapor) in a flame (emphasis added).

As to the argument to claim 58, since AXELBAUM teaches a plurality of independent reactant flows (gaseous chlorides and sodium vapor) prior to the reaction of the two vaporous materials in a flame to produce particles, claim 58 is obvious over AXELBAUM.

As to the argument that since JP 61-67836 does not teach, suggest or motivate

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a particle collector with a flow configured to receive particles from a plurality of independent reactant flows, JP '836 fails to disclose an element of the claimed invention, the Examiner finds this is to be unpersuasive. As the Examiner pointed out in the last Office action that since JP '836 discloses an apparatus which has the ability to manufacture particles with different particle sizes and compositions over that of prior art's apparatus to the production of particles of the same particle size and of the same type, JP '836 contemplates the use of his apparatus to the production of particles of the same size. As such the omission of an element (the extra filter) when collecting particles of the same size. As to the making an element integral, it is the use of one filter to collect particles when particles of same particle size are produced by the apparatus. Also, when the claims are alternatively rejected over JP '836 as set forth in the paragraph 4 above, JP '836 discloses that the apparatus with the particle collection apparatus configured to receive particles generated from the plurality of reactant streams.

As to the argument to the rejection of claims 23, 25-27, 52, 53, 58 and 59, since JP '836 discloses that his apparatus has the ability to manufacture particles

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with different sizes and compositions besides a single type of particles or alternatively discloses that the apparatus with the particle collection apparatus configured to receive particles generated from the plurality of reactant streams, it's the Examiner's position to maintain the rejection.

To the argument to the rejected claims 24, 56, 57 and 60-62 over JP '836 in view of BEATY '128, because JP '836 discloses that his apparatus has the ability to manufacture particles with different sizes and compositions besides a single type of particles or alternatively discloses that the apparatus with the particle collection apparatus configured to receive particles generated from the plurality of reactant streams and because BEATY '128 shows the sequential deposition of manufactured particles from individual sources or combination of particles prior to collection, it's the Examiner's position to maintain the rejection.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

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time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

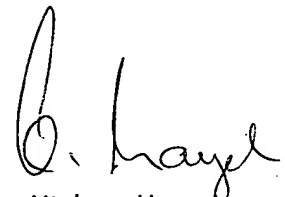
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (703) 308-0477. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for this Group is (703) 872-9310 (non-after finals) or 872-9311 (after final).



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'K. Mayekar', with a stylized, cursive script.

Kishor Mayekar  
Primary Examiner  
Group 1700

KM  
April 3, 2003